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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/541,774 | 07/07/2005 | Pierre Barberis | 1298/10025 | 1671 |

23280 7590 08/25/2008

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| EXAMINER | |
|---|---|
| SHEVIN, MARK L | |
| ART UNIT | PAPER NUMBER |
| 1793 | |
| MAIL DATE | DELIVERY MODE |
| 08/25/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Advisory Action Before the Filing of an Appeal Brief | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/541,774 | BARBERIS ET AL. | |
| | Examiner | Art Unit | |
| | Mark L. Shevin | 1793 | |

*--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

THE REPLY FILED 01 August 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *11-20*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See the attachment.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/Roy King/
Supervisory Patent Examiner, Art Unit 1793

The remaining claims 11-20 are rejected for the same reasons as stated in the previous Office Action mailed April 30th, 2008.

Applicants assert (final para of p. 4) that "the intermediate quenching of Sabol's second forging process…would not be suitable for ingots of the claimed size and it is respectfully submitted that one of skill in the art would never use Sabol's second forging process with such ingots due to hydride formation."

In response, The Examiner is not persuaded as Applicants have not offered evidence as to why hydride formation would be known to one of skill in the art. While the Examiner acknowledges that a hot product coming into contact with water could cause problems with hydride formation, if one of ordinary skill is familiar with hydride problems, then presumably one would avoid quenching with water by using a different quench media or quenching method.

Applicants assert (p. 5, para 2) that Sabol fails to teach or show the limitation of "wherein a second forging stage follows the first forging stages" as recited in claim 11 because the "second forging is part of the entire process".

In response, the Examiner still holds that Sabol teaches that the billet may be forged a second time to a size and shape appropriate for extrusion and thus meets the plain meaning of the claim limitation.

Applicants assert (p. 6, final para) that Armand fails to teach to show "two-stage forging the ingot to produce the semi-finished product intended to be formed to obtain the elongated product…" as recited in claim 11 because hot rolling is not a forging process.

With respect to the rejection of claim 17 using Sabol in view of Armand, Applicant asserts that Sabol does not teach the claimed process in that two forging operations are not taught or suggested (p. 6 , final par). As stated in the previous Office Action mailed April 30th , 2008, Armand teaches a method of hot working zirconium alloys by forging cast ingots in the alpha + beta range of 830-950 °C (col. 3, lines 10-13 and 42-51). The duration of thermal treatment may be shortened by combining mechanical effects, in the form of consecutive hot working operations such as forging, carried out in the alpha + beta range with intermediary reheating (col. 3, lines 42-51). Armand teaches a species examples with two forging operations performed at 850 C (in the alpha + beta phase field) and concludes that this process increased strength 7-20%, and yielded a lowered creep rate (col. 5, lines 1—17) when compared to a dual alpha phase working process (sequence 1, col. 4, lines 31-34).

Applicant next asserts that there is no motivation to combine Sabol in view of Armand, however motivation to combine comes from Armand's teaching of increased strength and lowered creep rate using his process and Armand furthermore states that his process could be applied to other zirconium alloys as long as they have a bi-phase alpha+beta range between 880 and 950 °C (col. 5, lines 57-61).

Lastly, Applicant states that Armand uses ingots that are much smaller then the present invention. However, one could attain the claims size limitations through routine optimization as Sabol repeatedly references later operation as being adjustable or tailored to the size and shape of the ingot billet (p. 2, lines 29-35). Moreover, changes in size and shape do not generally support patentability (MPEP 2144.04, IV, sections A and B.)